

IP Network Video

VideoJet 1000 Single - channel MPEG-2/4 Encoder and Decoder



The VideoJet 1000 Encoder & Decoder combines simultaneous MPEG-2 and MPEG-4 transmission with Dual streaming, allowing remote users connected via slow lines as well as local users directly connected to the LAN to view high-quality video simultaneously. MPEG-2, the digital video compression standard originally developed for broadcasting produces extremely sharp pictures with superb detail. The more compact MPEG-4 standard is the right choice for strictly limited bandwidth.

For specialized applications, the VideoJet 1000 is also available in an MPEG-2 only version. Compatible with PAL or NTSC sources, it can function both as an encoder and as a decoder when linked to a monitor. Its video signal can be simultaneously displayed on a PC using VIDOS video management software or a web browser.

Thanks to the integrated hard drive, the VideoJet 1000 stores up to three (3) months of video, allowing simultaneous playback and backup while recording.

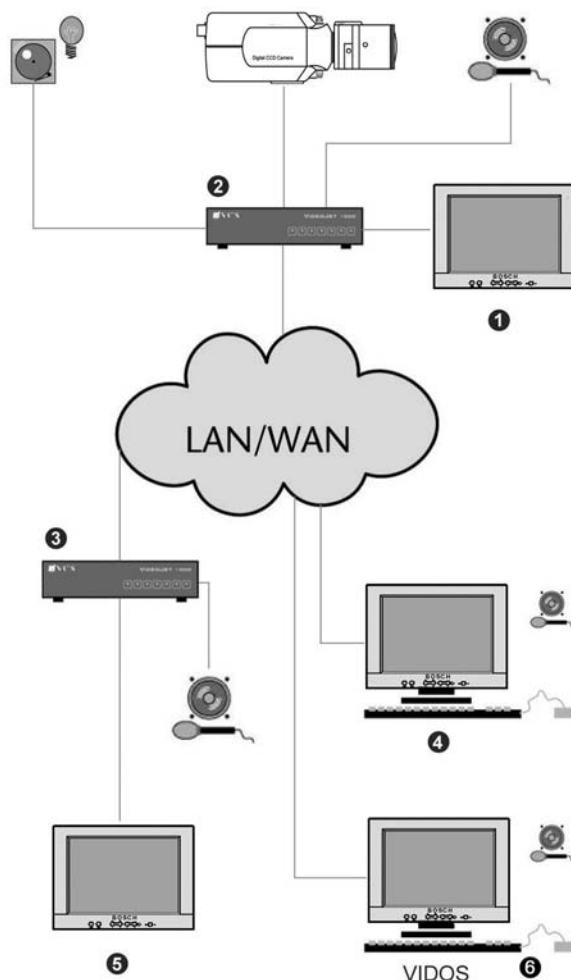
Features

- MPEG-2 Only or MPEG-2/4
- Integrated Hard Drive Recording
- MPEG-2 @ 4CIF
- MPEG-4 @ 4CIF/2CIF/CIF
- Bandwidth-efficient Dual Streaming
- Integrated Motion Detection
- Multicast & Internet Streaming
- Full-duplex Audio
- Alarm Inputs & Relay Output
- Serial Data Port

Parts Included

Quant.	Component
1	VideoJet 1000 incl. mains cable
1	RS232 Null Modem Cable
1	Quick installation guide
1	CD-ROM with VCS software and manual

Installation/Configuration Notes



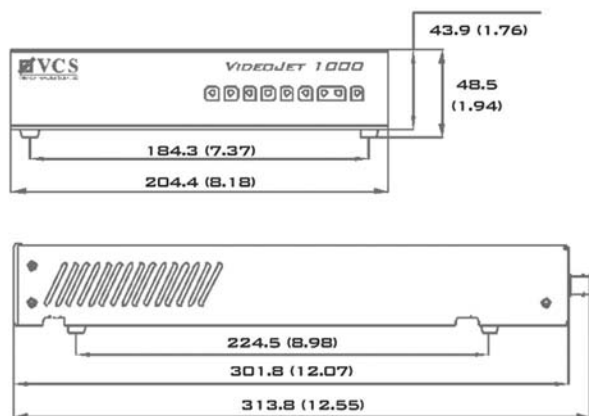
01	Analog monitor	04	Web Browser
02	VideoJet 1000	05	Analog Monitor
03	VideoJet 1000	06	VIDOS Workstation



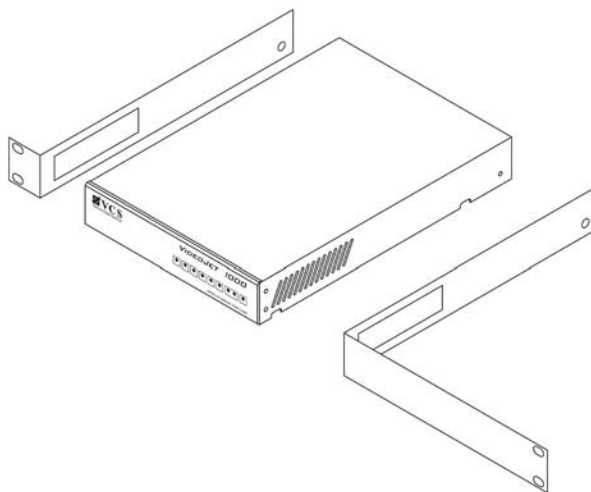
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|---------------------------------|------------------------------------|
| 01 Infrared receiver | 05 Relay output activity |
| 02 Harddisk | 06 Serial port activity |
| 03 Video Signal Present | 07 Ethernet Link Active, packet TX |
| 04 Alarm input enabled / active | 08 Power on / connected |



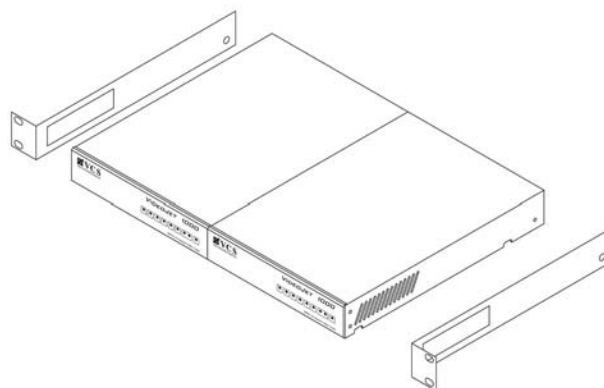
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|------------------------|-------------------------------|
| 01 Video in | 06 FastEthernet 10/100 Base-T |
| 02 Video Out | 07 Audio Out |
| 03 Audio in | 08 Relay out |
| 04 Alarm in | 09 Com2: RS232 |
| 05 COM1: RS232/422/485 | 10 Power |



Dimensions in mm (inches)



One Device Rackmount (optional)



Two Device Rackmount (optional)

Technical Specifications	
Electrical	
Video Standards	ISO/IEC 13818-2 (MPEG-2) MP@ML; ISO/IEC 14496 (MPEG-4*); M-JPEG
Video Data Rate	MPEG-2: 1 MBit/s - 8 MBit/s MPEG-4: 9.6 kBit/s - 4 MBit/s Constant & variable
Video Resolution	MPEG-2: 720 x 576/480 (full D1: 50 resp. 60 fields/s**) 352 x 288 (CIF: 25 resp. 30 fps**) MPEG-4: 704 x 576*** (4CIF: 9 fps**) 704 x 288 (2CIF: 18 fps**) 352 x 288 (CIF: 25 resp. 30 fps**) 176 x 144 (QCIF: 25 resp. 30 fps**)
GOP Structure	I, IP, IPB, IPBB
Overall Delay (IP)	MPEG-2: 198 resp. 180 ms (PAL resp. NTSC) MPEG-4: 100 ms
Select. Frame Rate	1-50 resp. 60 fields/s (PAL resp. NTSC); Field/frame based coding
Audio Standards	MPEG-1: ISO/IEC 11172-3; MPEG-2: Layer I/II; 300 Hz - 10 kHz MPEG-4: G.711; 300 Hz - 3.4 kHz
Audio Data Rate	MPEG-2: 256 kBit/s MPEG-4: 80 kBit/s
Audio Sample Rate	MPEG-2: 48 kHz MPEG-4: 8 kHz
Multiplex Standards	MPEG-2: ISO/IEC 13818-1
Stream Types	Elementary (video only), program stream
Network Protocols	RTP, Telnet, UDP, TCP, IP, HTTP, IGMP, ICMP, ARP, SNMP (traps)
Software Update	Flash ROM, remote programmable
Configuration	Via Web browser, built-in Web server

Interfaces	
Video In	1x analog composite: NTSC or PAL; BNC connector 75 Ohm switchable, 0.7-1.2 Vpp
Video Out	1x analog composite: NTSC or PAL; BNC connector 75 Ohm, 1 Vpp
Audio In	1x stereo line in, stereo jack 3.5 mm, 3 Vpp, ca. 50 kOhm
Audio Out	1x stereo line out, stereo jack 3.5 mm, 2.5 Vpp, 60 mW, min. 8 Ohm
Alarm In	1x clamp (non-isolated closure contact type), max. activation resistance 10 Ohm
Relay Out	1x clamp, 30 Vpp, 1 A
COM Ports	1x RS232/422/485, 9-pin Sub-D; 1x RS232, 9-pin Sub-D
Ethernet	10/100 Base-T, auto sensing, half/full duplex, RJ45
Storage Media	1x 40 GB HD integrated; optional: 1x 120 GB HD integrated

Environmental	
Input Voltage	90 - 250 VAC, 50/60 Hz
Power Consumption	Max. 33 VA
Weight	App. 2.7 kg (5,95lbs)
Operating Temperature	0 °C - 50 °C (32 - 122 °F) ambient temperature
Humidity	20 - 80%, atmospheric humidity (not condensing)
Approvals	CE: IEC 60950; UL 1950; J 60950; AS/NZS 3548; EN 55103-1, -2; EN 55130-4; EN 55022; EN 55024; EN 61000-3-2; EN 61000-3-3; FCC 47 CFR Ch.1 Part 15

* MPEG-4 only with resp. version

** Depends on picture content

*** Supported from firmware version 3.00 onwards

Ordering Information**Model & Description**

VJ1000 2928

MPEG-2 DVR & encoder with 40 HDD, 2 serial interfaces, audio,
alarm in and relay out

VJ1000 2929

MPEG-2 DVR & encoder with 120 HDD, 2 serial interfaces, audio,
alarm in and relay out

VJ1000 2904

MPEG-2/4 DVR & encoder with 40 HDD, 2 serial interfaces, audio,
alarm in and relay out

VJ1000 2924

MPEG-2/4 DVR & encoder with 120 HDD, 2 serial interfaces,
audio, alarm in and relay out

Hardware Accessories

VJ1000 1412

Rack mounting kit for Video Jet 1000 series

VideoJet 8000 8-channel MPEG-2 Encoder



The VideoJet 8000 delivers the highest quality real-time video available today. Its advanced hardware engine produces 30 images per second of pure MPEG-2 DVD-quality video. This power is further multiplied by incorporating multiple encoders within the single unit, delivering eight full-motion video channels. Each channel generates fully interlaced non-multiplexed video at 30 IPS.

The video can be viewed on a standard PC using the VIDOS video management software or a web browser. Alternately, when used in conjunction with an MPEG-2 hardware decoder (such as the VIP 1000E), you can create point-to-point hybrid analog/digital solutions. This technology uses the highest quality analog cameras and analog CCTV monitors, but with a pure IP solution in-between.

The VideoJet 8000 8-channel MPEG-2 encoder features three key recording modes. The simplest mode is continuous. The alarm-sensitive mode also runs continuously, but increases the frame rate on alarm. A pre-alarm option preserves a short segment of video just prior to the alarm, at 1, 2, or 25/30 IPS (PAL/NTSC).

The VideoJet 8000's 120, 240, or 600 GB internal hard disk records weeks at a time locally, or for more extended recording periods it can use the VIDOS-NVR network video recorder. Such an NVR server has one or two RAID5 disk arrays attached for maximum fault tolerance and a storage capacity of over 12 TB.

The VideoJet 8000 is powerful enough to simultaneously allow MPEG-2 live viewing, recording, playback, and backup. With eight channels in a rack-mountable 1U form factor it offers the highest port density at this quality of video. Combined with a complete set of security and distributed system management features it is the market's most powerful, highest quality MPEG-2 encoder and recorder.

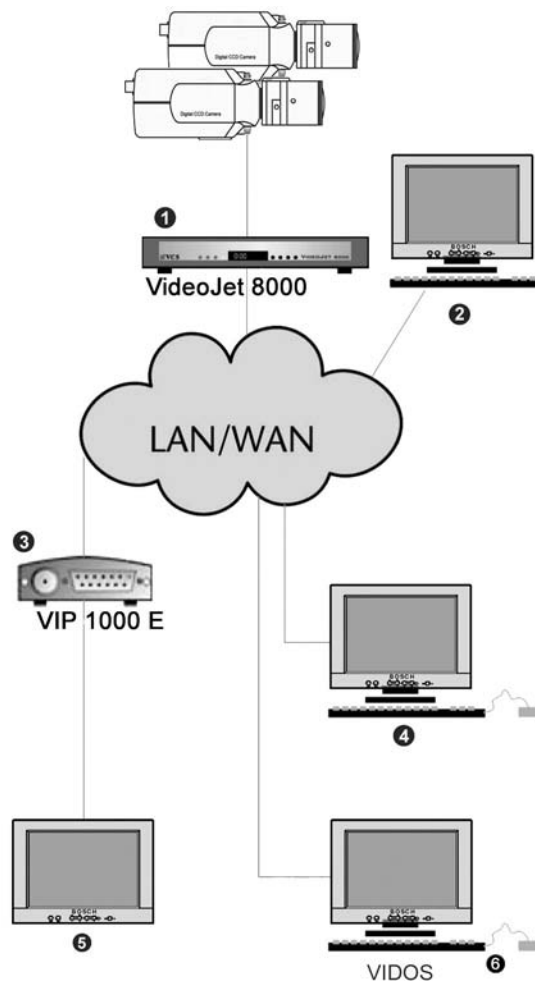
Features

- 8-channel Encoder
- 30 IPS on Every Channel Simultaneously
- MPEG-2 @ 4CIF
- Internal Storage (120/240/600 GB)
- Gigabit Ethernet
- 10 Alarm Inputs
- Low Profile Rack-mountable
- Multicasting
- Serial Data Port

Parts Included

Quant.	Component
1	VideoJet 8000 with internal wide range power supply incl. IEC power cable
1	RS232 Null modem cable
1	Accessory Kit (19" rack mounting)
1	Quick Installation Guide
1	CD-ROM with manual and VCS software

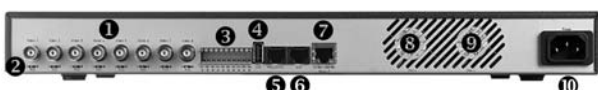
Installation/Configuration Notes



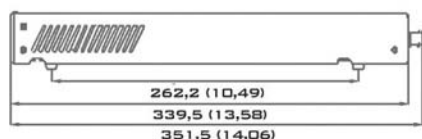
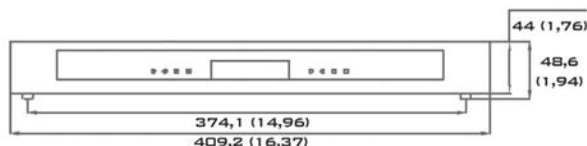
01	VideoJet 8000 Encoder	04	Web Browser
02	VIDOS Workstation	05	Analog Monitor
03	VIP 1000E Decoder	06	VIDOS Workstation



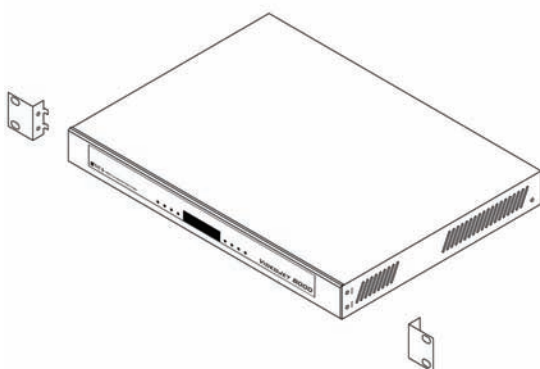
- | | |
|----------------------|--------------|
| 01 Power Indicator | 05 Menu/exit |
| 02 HDD indicator | 06 Set |
| 03 Failure indicator | 07 UP |
| 04 Display | 08 Down |



- | | |
|----------------------------------|----------------------------------|
| 01 Video In | 06 ISDN port (EU only) |
| 02 75 Ohm Video Termination (x8) | 07 GigaBitEthernet 10/100 Base-T |
| 03 Alarm inputs (10x) | 08 Fan 1 |
| 04 USB Port | 09 Fan 2 |
| 05 COM Port: RS232/485 | 10 Power Connector |



Dimensions in mm (inches)



Rack Mount Kit

Technical Specifications

Electrical

VideoJet 8000 MPEG-2 Encoder

Video Standards	ISO/IEC13818-2 (MPEG-2) MP@ML
Video Data Rate	1 - 5 Mbps per channel constant & variable
Video Frame-rate	1-25/30 IPS (PAL/NTSC); Field/frame-based coding
Video Resolution	704 x 576/480 (4CIF: 25/30 IPS*) (D1) 352 x 288/240 (CIF: 25/30 IPS*)
Storage Media	120, 240, or 600 GB HD integrated
GOP Structure	I, IP, IPB, IPBB
Overall Delay (IP)	174/164 ms (PAL/NTSC)
Select Frame Rate	25/30 IPS streaming (PAL/NTSC) 1, 2 or 25/30 IPS internal recording Field/frame-based coding
Multiplex Standards	ISO/IEC 13818-1 (MPEG-2)
Stream Types	Video Elementary Stream VES(video only)
Network Protocols	RTP, Telnet, UDP, TCP, IP, HTTP, IGMP, ICMP, ARP, SNMP
Software Update	Flash ROM, remote programmable
Configuration	Via Web browser, built-in Web server Interfaces or serial interface
Video In	8x Analog composite: NTSC/PAL; BNC connector 75 Ohm switchable, 0.7 - 1.2 Vp-p
Alarm In	10x (non-isolated closure contact type), max. activation resistance 10 Ohm
Connectors	20-way spring clamp for alarm inputs
COM Ports	1x RS-232/422/485, RJ-45
Ethernet	10/100/1000Base-T, auto-sensing, half-/full-duplex, RJ-45

*Depends on picture content

Environmental

Input Voltage	90 - 250 VAC, 50/60 Hz
Power	Max. 60 VA
Consumption	
Weight	App. 6.0 kg (13.22lbs) with 240 GB HD
Operating Temperature	0°C - 50°C (32°F - 122 °F) ambient temperature
Humidity	20 - 80%, atmospheric humidity (not condensing)
Approvals	CE: IEC 60950; UL 1950; J 60950; AS/NZS 3548; EN 55103-1, -2; EN 55130-4; EN 55022; EN 55024; EN 61000-3-2; EN 61000-3-3; FCC 47 CFR Ch.1 Part 15

*only with audio version **depends on picture content ***supported with later firmware version

Ordering Information**Model & Description**

VJ8000 2906

8 channels MPEG-2 with 1 MPEG4 channel DVR and encoder with
120 HDD

VJ8000 2926

8 channels MPEG-2 with 1 MPEG4 channel DVR and encoder with
240 HDD

VJ8000 2927

8 channels MPEG-2 with 1 MPEG4 channel DVR and encoder with
600 HDD

VJ8000A 2907

8 channels MPEG-2 with 1 MPEG4 channel DVR and encoder with
120 HDD audio

VJ8000A 2936

8 channels MPEG-2 with 1 MPEG4 channel DVR and encoder with
240 HDD audio

VJ8000A 2937

8 channels MPEG-2 with 1 MPEG4 channel DVR and encoder with
600 HDD audio

VideoJet XPro



Designed for the toughest demands of professional CCTV, large-scale security projects and enterprise TV distribution the VideoJet XPro features unlimited flexibility and scalability. Each 7-HU XPro cabinet is available with single or redundant power supply. It has room for up to 20 VideoJet XPro cartridges providing a maximum of 160 non-multiplexed video streams.

Fully customizable the VideoJet XPro can come with any combination out of 3 different cartridge types offered.

The V8 cartridge transmits 8 PAL or NTSC video channels, the VA8 in addition offers full-duplex audio channels.

The HDD cartridge adds hard disks for efficient local recording and VCS's ANR high-reliability networked recording.

Highest port-density and uncompromising video quality make the VideoJet XPro a great drop-in replacement for existing multiplexers and DVRs. It provides exceptional price/performance, modularity and reliability particularly required for projects in government, retail and transportation. With VCS's VIDOS and VIDOS-NVR software, the XPro is ideal for applications with demanding specifications and long life spans.

Features

- Modular digital CCTV matrix
- Highest port-density in compact 7 HU
- 6 MPEG-2 and MPEG-4 encoder cartridge
- 2 Hard disk cartridges
- Single or redundant power supply
- Transmitter and DVR operation
- GigabitEthernet, USB
- Triplex hard disk recording
- Integrated video scene analysis
- Multicasting & Internet Streaming

System Overview

Each XPro video cartridge provides 8 non-multiplexed video streams simultaneously over Gigabit-Ethernet. Two different types of cartridges are available for Encoding, MPEG-2 and MPEG-4. For local recording you can add extra hard disk cartridges.

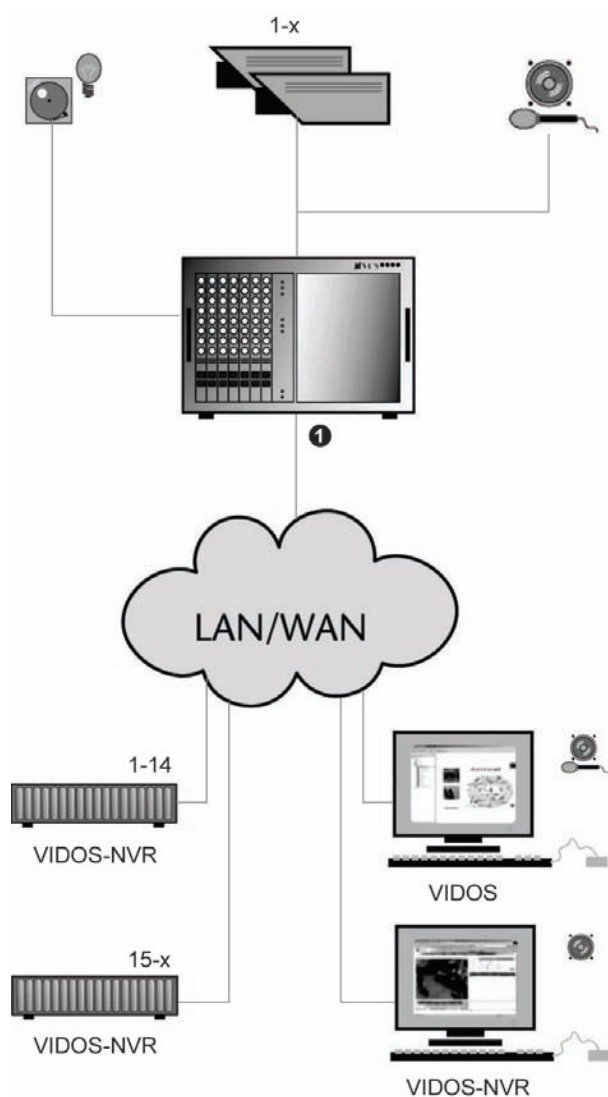
Compatible with both, PAL or NTSC sources the signal can be viewed on any standard PC using VCS software decoder VIDOS or a web browser. With one of Bosch MPEG-2 or MPEG-4 hardware decoders you can put up box to box solutions. The VA8 cartridge additionally offers a video output for local display on a CCTV monitor.

Pure video cartridge V8 is 4-U wide, the VA8 cartridge with audio is 8-U width. Also 8-U in size the HDD cartridge features two 120 GB hard disks free in allocation allowing simultaneous playback and back-up while recording.

Parts Included

Quant.	Component
1	Content depending on customized configuration
1	Quick Installation Guide
1	CD-ROM with VCS software and manual

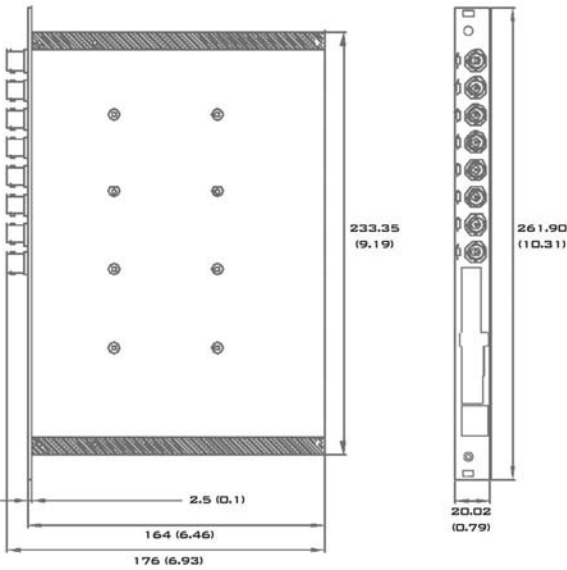
Installation/Configuration Notes



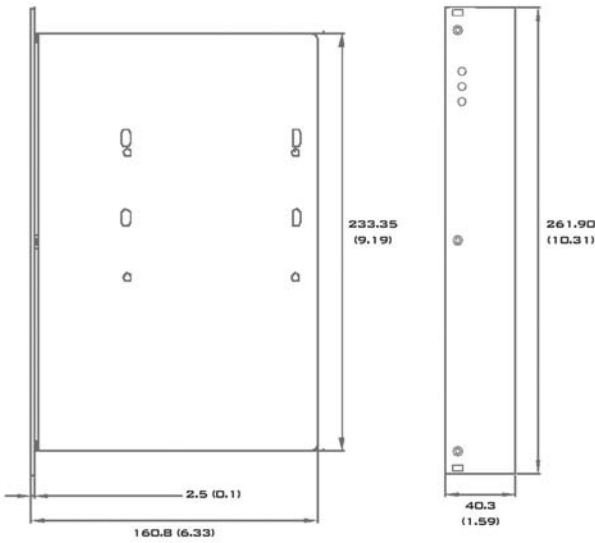
01 VideoJet XPro



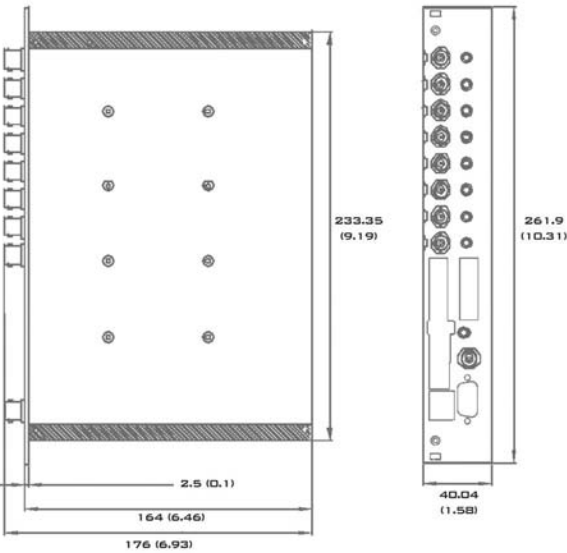
Rear view



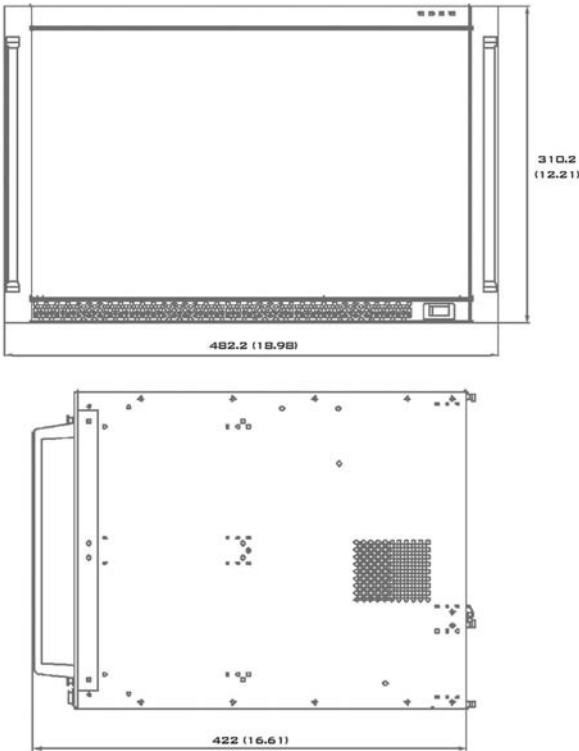
VideoJet XPro V8 Dimensions in mm (inches)



Cartridge HDD Dimensions in mm (inches)



VideoJet Xpro VA8 Dimensions in mm (inches)



Cabinets Dimensions in mm (inches)

Technical Specifications	
Electrical – Videojet Xpro V8	
Video Standards	ISO/IEC 13818-2 (MPEG-2) MP@ML; M-JPEG
Video Data Rate	1 MBit/s - 5 MBit/s per channel Constant & variable
Video Resolution	720 x 576/480 (full D1: 50 resp. 60 fields/s*) 352 x 288 (CIF: 25 resp. 30 fps*)
GOP Structure	I, IP, IPB, IPBB
Overall Delay (IP)	198 resp. 180 ms (PAL resp. NTSC)
Select. Frame Rate	1-50 resp. 60 fields/s (PAL resp. NTSC); Field/frame based coding
Multiplex Standards	ISO/IEC 13818-1 (MPEG-2)
Stream Types	Elementary (video only), program stream
Network Protocols	RTP, Telnet, UDP, TCP, IP, HTTP, IGMP, ICMP, ARP, SNMP
Software Update	Flash ROM, remote programmable
Configuration	Via Web browser, built-in Web server
Interfaces	
Video In	8x analog composite: NTSC or PAL; BNC connector 75 Ohm switchable, 0.7-1.2 Vpp
Alarm In	10x clamp (non-isolated closure contact type), max. activation resistance 10 Ohm
COM Port	1x RS232/422/485, RJ45
USB Port**	1x 2.0 external interface
Ethernet	10/100/1000 Base-T, auto sensing, half/full duplex, RJ45
Storage Media (opt.)	Cartridge HDD: 2x 120 or 2x 300 GB HD (8 WU)
Environmental	
Input Voltage	Supplied by cabinet
Power	Max. 35 VA
Consumption	
Weight	App. 0.7 kg (1.54lbs)
Operating Temperature	0°C - 50°C (32 - 122 °F) ambient temp.
Humidity	20 - 80% atmospheric humidity (not condensing)
Approvals	CE: IEC 60950; UL 1950; J 60950; AS/NZS 3548; EN 55103-1, -2; EN 55130-4; EN 55022; EN 55024; EN 61000-3-2; EN 61000-3-3; FCC 47 CFR Ch.1 Part 15

*depends on picture content **supported with later firmware version

Electrical – Videojet Xpro Va8	
Video Standards	ISO/IEC 13818-2 (MPEG-2) MP@ML; M-JPEG
Video Data Rate	1 MBit/s - 5 MBit/s per channel Constant & variable
Video Resolution	720 x 576/480 (full D1: 50 resp. 60 fields/s*) 352 x 288 (CIF: 25 resp. 30 fps*)
GOP Structure	I, IP, IPB, IPBB
Overall Delay (IP)	198 resp. 180 ms (PAL resp. NTSC)
Select. Frame Rate	1-50 resp. 60 fields/s (PAL resp. NTSC); Field/frame based coding
Audio Standards	MPEG-1: ISO/IEC 11172-3; MPEG-2: Layer I/II; 300 Hz - 10 kHz
Audio Data Rate	256 kBit/s
Audio Sample Rate	48 kHz
Multiplex Standards	ISO/IEC 13818-1 (MPEG-2)
Stream Types	Elementary (video only), program stream
Network Protocols	RTP, Telnet, UDP, TCP, IP, HTTP, IGMP, ICMP, ARP, SNMP
Software Update	Flash ROM, remote programmable
Configuration	Via Web browser, built-in Web server

Interfaces	
Video In	8x analog composite: NTSC or PAL; BNC connector 75 Ohm switchable, 0.7-1.2 Vpp
Video Out	1x analog composite: NTSC or PAL; BNC connector 75 Ohm, 1 Vpp
Audio	8x mono line in (50 kOhm), 8x mono line out (60 mW, min. 8 Ohm), stereo jack 3.5 mm, 1 Vpp or: 8x stereo line, stereo jack 3.5 mm, 50 kOhm, 1 Vpp
Alarm In	10x clamp (non-isolated closure contact type), max. activation resistance 10 Ohm
Relay Out	5x clamp, 30 Vpp, 1 A
COM Ports	1x RS232/422/485, RJ45, 1x RS232, 9-pin Sub-D
USB Port**	1x 2.0 external interface
Ethernet	10/100/1000 Base-T, auto sensing, half/full duplex, RJ45
Storage Media (opt.)	Cartridge HDD: 2x 120 or 2x 300 GB HD (8 WU)

Environmental	
Input Voltage	Supplied by cabinet
Power Consumption	Max. 40 VA
Weight	App. 1.0 kg
Operating Temperature	0°C - 50°C (32°F - 122 °F) ambient temp.
Humidity	20 - 80% atmospheric humidity (not condensing)
Approvals	CE: IEC 60950; UL 1950; J 60950; AS/NZS 3548; EN 55103-1, -2; EN 55130-4; EN 55022; EN 55024; EN 61000-3-2; EN 61000-3-3; FCC 47 CFR Ch.1 Part 15

*depends on picture content **supported with later firmware version

Electrical – Videojet Xpro V8-X4	
Video Standards	MPEG-4 M-JPEG
Video Data Rate	9 KBit/s - 6MBit/s
Video Resolution	720 x 576/480 (4CIF: 12 resp. 15fps) 720 x 288/346 (2CIF: 25 resp. 30fps) 352 x 288/346 (CIF: 25 resp. 30fps) 352 x 144/172 (QCIF: 25 resp 30fps)
GOP Structure	I, IP
Overall Delay (IP)	100 ms
Select. Frame Rate	up to 25 resp. 30 fps (PAL resp. NTSC); scalable video skip ratio
Network Protocols	RTP, Telnet, UDP, TCP, IP, HTTP, IGMP, ICMP, ARP, SNMP
Software Update	Flash ROM, remote programmable
Configuration	Via Web browser, built-in Web server

Interfaces	
Video In	8x analog composite: NTSC or PAL; BNC connector 75 Ohm switchable, 0.7-1.2 Vpp
Alarm In	10x clamp (non-isolated closure contact type), max. activation resistance 10 Ohm
COM Port	1x RS232/422/485, RJ45
USB Port**	1x 2.0 external interface
Ethernet	10/100/1000 Base-T, auto sensing, half/full duplex, RJ45
Storage Media (opt.)	Cartridge HDD: 2x 120 or 2x 300 GB HD (8 WU)

Environmental	
Input Voltage	Supplied by cabinet
Power Consumption	Max. 35 VA
Weight	App. 0.7 kg (1.54lbs)
Operating Temperature	0°C - 50°C (32 - 122 °F) ambient temp.
Humidity	20 - 80% atmospheric humidity (not condensing)
Approvals	CE: IEC 60950; UL 1950; J 60950; AS/NZS 3548; EN 55103-1, -2; EN 55130-4; EN 55022; EN 55024; EN 61000-3-2; EN 61000-3-3; FCC 47 CFR Ch.1 Part 15

*depends on picture content **supported with later firmware version

Electrical – Videojet Xpro VA8-X4	
Video Standards	MPEG-4 M-JPEG
Video Data Rate	9 KBit/s - 6MBit/s
Video Resolution	720 x 576/480 (4CIF: 12 resp. 15fps) 720 x 288/346 (2CIF: 25 resp. 30fps) 352 x 288/346 (CIF: 25 resp. 30fps) 352 x 144/172 (QCIF: 25 resp 30fps)
GOP Structure	I, IP
Overall Delay (IP)	100 ms
Select. Frame Rate	up to 25 resp. 30 fps (PAL resp. NTSC); scalable video skip ratio
Audio Standards	G711
Audio Data Rate	80 kBit/s per channel
Audio Sample Rate	8 kHz
Network Protocols	RTP, Telnet, UDP, TCP, IP, HTTP, IGMP, ICMP, ARP, SNMP
Software Update	Flash ROM, remote programmable
Configuration	Via Web browser, built-in Web server

Interfaces	
Video In	8x analog composite: NTSC or PAL; BNC connector 75 Ohm switchable, 0.7-1.2 Vpp
Video Out	1x analog composite: NTSC or PAL; BNC connector 75 Ohm, 1 Vpp
Audio	8x mono line in (50 kOhm), 8x mono line out (60 mW, min. 8 Ohm), stereo jack 3.5 mm, 1 Vpp or: 8x stereo line, stereo jack 3.5 mm, 50 kOhm, 1 Vpp
Alarm In	10x clamp (non-isolated closure contact type), max. activation resistance 10 Ohm
Relay Out	5x clamp, 30 Vpp, 1 A
COM Ports	1x RS232/422/485, RJ45, 1x RS232, 9-pin Sub-D
USB Port**	1x 2.0 external interface
Ethernet	10/100/1000 Base-T, auto sensing, half/full duplex, RJ45
Storage Media (opt.)	Cartridge HDD: 2x 120 or 2x 300 GB HD (8 WU)

Environmental	
Input Voltage	Supplied by cabinet
Power Consumption	Max. 40 VA
Weight	App. 1.0 kg
Operating Temperature	0°C - 50°C (32°F - 122 °F) ambient temp.
Humidity	20 - 80% atmospheric humidity (not condensing)
Approvals	CE: IEC 60950; UL 1950; J 60950; AS/NZS 3548; EN 55103-1, -2; EN 55130-4; EN 55022; EN 55024; EN 61000-3-2; EN 61000-3-3; FCC 47 CFR Ch.1 Part 15

*depends on picture content **supported with later firmware version

Electrical – Videojet Xpro V8-X8	
Video Standards	MPEG-4 M-JPEG
Video Data Rate	9 KBit/s - 6MBit/s
Video Resolution	720 x 576/480 (4CIF: 25 resp. 30fps) 720 x 288/346 (2CIF: 25 resp. 30fps) 352 x 288/346 (CIF: 25 resp. 30fps) 352 x 144/172 (QCIF: 25 resp 30fps)
GOP Structure	I, IP
Overall Delay (IP)	100 ms
Select. Frame Rate	up to 25 resp. 30 fps (PAL resp. NTSC); scalable video skip ratio
Network Protocols	RTP, Telnet, UDP, TCP, IP, HTTP, IGMP, ICMP, ARP, SNMP
Software Update	Flash ROM, remote programmable
Configuration	Via Web browser, built-in Web server
Interfaces	
Video In	8x analog composite: NTSC or PAL; BNC connector 75 Ohm switchable, 0.7-1.2 Vpp
Alarm In	10x clamp (non-isolated closure contact type), max. activation resistance 10 Ohm
COM Port	1x RS232/422/485, RJ45
USB Port**	1x 2.0 external interface
Ethernet	10/100/1000 Base-T, auto sensing, half/full duplex, RJ45
Storage Media (opt.)	Cartridge HDD: 2x 120 or 2x 300 GB HD (8 WU)
Environmental	
Input Voltage	Supplied by cabinet
Power	Max. 35 VA
Consumption	
Weight	App. 0.7 kg (1.54lbs)
Operating Temperature	0°C - 50°C (32 - 122 °F) ambient temp.
Humidity	20 - 80% atmospheric humidity (not condensing)
Approvals	CE: IEC 60950; UL 1950; J 60950; AS/NZS 3548; EN 55103-1, -2; EN 55130-4; EN 55022; EN 55024; EN 61000-3-2; EN 61000-3-3; FCC 47 CFR Ch.1 Part 15

*depends on picture content **supported with later firmware version

Electrical – Videojet Xpro VA8-X8	
Video Standards	MPEG-4 M-JPEG
Video Data Rate	9 KBit/s - 6MBit/s
Video Resolution	720 x 576/480 (4CIF: 25 resp. 30fps) 720 x 288/346 (2CIF: 25 resp. 30fps) 352 x 288/346 (CIF: 25 resp. 30fps) 352 x 144/172 (QCIF: 25 resp 30fps)
GOP Structure	I, IP
Overall Delay (IP)	100 ms
Select. Frame Rate	up to 25 resp. 30 fps (PAL resp. NTSC); scalable video skip ratio
Audio Standards	G711
Audio Data Rate	80 kBit/s per channel
Audio Sample Rate	8 kHz
Network Protocols	RTP, Telnet, UDP, TCP, IP, HTTP, IGMP, ICMP, ARP, SNMP
Software Update	Flash ROM, remote programmable
Configuration	Via Web browser, built-in Web server
Interfaces	
Video In	8x analog composite: NTSC or PAL; BNC connector 75 Ohm switchable, 0.7-1.2 Vpp
Video Out	1x analog composite: NTSC or PAL; BNC connector 75 Ohm, 1 Vpp
Audio	8x mono line in (50 kOhm), 8x mono line out (60 mW, min. 8 Ohm), stereo jack 3.5 mm, 1 Vpp or: 8x stereo line, stereo jack 3.5 mm, 50 kOhm, 1 Vpp
Alarm In	10x clamp (non-isolated closure contact type), max. activation resistance 10 Ohm
Relay Out	5x clamp, 30 Vpp, 1 A
COM Ports	1x RS232/422/485, RJ45, 1x RS232, 9-pin Sub-D
USB Port**	1x 2.0 external interface
Ethernet	10/100/1000 Base-T, auto sensing, half/full duplex, RJ45
Storage Media (opt.)	Cartridge HDD: 2x 120 or 2x 300 GB HD (8 WU)
Environmental	
Input Voltage	Supplied by cabinet
Power Consumption	Max. 40 VA
Weight	App. 1.0 kg
Operating Temperature	0°C - 50°C (32°F - 122 °F) ambient temp.
Humidity	20 - 80% atmospheric humidity (not condensing)
Approvals	CE: IEC 60950; UL 1950; J 60950; AS/NZS 3548; EN 55103-1, -2; EN 55130-4; EN 55022; EN 55024; EN 61000-3-2; EN 61000-3-3; FCC 47 CFR Ch.1 Part 15

Specifications – Cartridge Hdd

Storage	2x 120 or 2x 300 GB IDE HD
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Environmental

Input Voltage	Supplied by cabinet
Power Consumption	Max. 48 VA
Weight	App. 1.6 kg
Operating Temperature	0°C – 50°C (32°F – 122 °F) ambient temperature
Humidity	20 – 80% atmospheric humidity (not condensing)

Approvals	CE: IEC 60950; UL 1950; J 60950; AS/NZS 3548; EN 55103-1, -2; EN 55130-4; EN 55022; EN 55024; EN 61000-3-2; EN 61000-3-3; FCC 47 CFR Ch.1 Part 15
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Specifications - Cabinets

Power Supply	1x integrated power supply; alternative: two redundant integrated power supplies
Input Voltage	90 - 250 VAC, 50/60 Hz
Power Consumption	Max. 600 VA
Weight	App. 3.5 kg
Operating Temperature	0°C - 50°C (32°F - 122 °F) ambient temperature
Humidity	20 - 80% atmospheric humidity (not condensing)
Approvals	CE: IEC 60950; UL 1950; J 60950; AS/NZS 3548; EN 55103-1, -2; EN 55130-4; EN 55022; EN 55024; EN 61000-3-2; EN 61000-3-3; FCC 47 CFR Ch.1 Part 15

Ordering Information**Model & Description**

XPro V8 2410

VJXPro V8 - 8 channels MPEG-2 with 1 MPEG4 channel card

XPro VA8 2420

VJXPro VA8 -8 channels MPEG-2 with 1 MPEG4 channel card,
with audio**Hardware Accessories**

XPro S1 2401

19-inch cabinet for up to 160 video channels

XPro R2 2406

19-inch cabinet for up to 160 video channels

XPro HDD 2430

VJ XPro HDD - dual hard disk board with 240 GB disks

XPro HDD 2432

VJ XPro HDD - dual hard disk board with 600 GB disks